PATENT
Attorney Docket No. VXM-001B

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S):   Vitaliano *et al.*

SERIAL NO.:   10/661,466   GROUP NO.:   1631

FILING DATE: September 11, 2003   EXAMINER: Not yet assigned

TITLE: Quantum Information Processing Elements and Quantum Information Processing Platforms Using Such Elements

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the provisions of 37 C.F.R. 1.97 and 1.98, Applicants hereby make of record the patents and publications listed on the accompanying Form PTO-1449, and other information contained herein, for consideration by the Examiner in connection with the examination of the above-identified patent application. In accordance with the U.S. Patent Office's partial waiver of the requirement under 37 C.F.R. 1.98(a)(2)(i), only copies of the foreign patent documents and non-patent publications are enclosed.

REMARKS

In accordance with the provisions of 37 C.F.R. 1.97, this statement is being filed (CHECK ONE):

☒   (1)   within three (3) months of the **filing date** of a national application other than a continued prosecution application under 37 C.F.R. 1.53(d), or within three (3) months of the **date of entry of the national stage** as set forth in 37 C.F.R. 1.491 in an international application, or before the mailing of the **first Office action** on the merits, or before the mailing of a **first Office action** after the filing of a request for continued examination under 37 C.F.R. 1.114; or

☐   (2)   after the period defined in (1) but before the mailing date of a **final action** or a **notice of allowance** under 37 C.F.R. 1.311, and
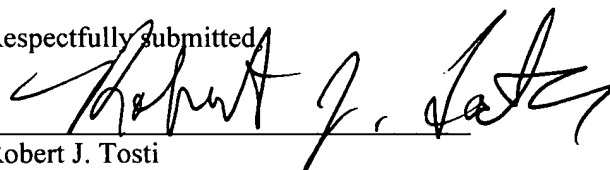
    ☐   the requisite Statement is below, **OR**

☐   the requisite fee under 37 C.F.R. 1.17(p), namely **$180.00**, is included herein, or

☐   (3)   after the mailing date of a **final action** or **notice of allowance** but before the payment of the **issue fee, AND**

☐   the requisite Statement is below, **AND**

☐   the requisite petition fee under 37 C.F.R. 1.17(p), namely **$180.00** is included herein.

It is respectfully requested that each of the patents and publications listed on the attached Form PTO-1449, and other information contained herein, be made of record in this application.

Respectfully submitted,

Date: July 19, 2004
Reg. No. 35,393

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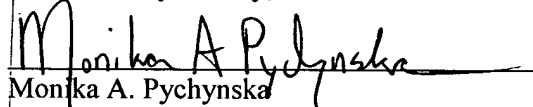Fax No.: (617) 248-7100

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PATENT
Attorney Docket No. VXM-001B

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S):   Vitaliano *et al.*

SERIAL NO.:   10/661,446   GROUP NO.:   1631

FILING DATE: September 11, 2003   EXAMINER: Not yet assigned

TITLE: Quantum Information Processing Elements and Quantum Information Processing Platforms Using Such Elements

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CERTIFICATE OF FIRST CLASS MAILING UNDER 37 C.F.R. 1.8

     I hereby certify that this correspondence, and any document(s) referred to as enclosed herein, is/are being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to the **Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450** on this **19th** day of **July, 2004.**
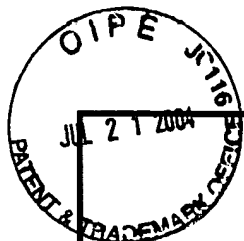
Monika A. Pychynska

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

     Submitted herewith is/are:

     Submitted are:

(1)   Transmittal Form (1 pg.);

(2)   Information Disclosure Statement (2 pgs.);

(3)   PTO Form-1449 (6 pgs.);

(4)   copies of references cited (C1-C95); and

(5)   a return receipt postcard.

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TRANSMITTAL FORM

Application Serial Number	10/661,466
Filing Date	September 11, 2003
First Named Inventor	Vitaliano
Group Art Unit	1631
Examiner Name	Not yet assigned
Attorney Docket No.	VXM-001B
BATCH NO. (after allowance)	Not applicable
Patent No.	Not applicable
Issue Date	Not applicable

ENCLOSURES *(check all that apply)*

☐ Fee Transmittal Form
    ☐ Check Attached
    ☐ Copy of Fee Transmittal Form

☐ Amendment/Response
    ☐ Preliminary
    ☐ After Final
    ☐ Affidavits/declaration(s)
    ☐ Letter to Official Draftsperson including Drawings
    [Total Sheets _____]

☐ Petition for Extension of Time

☒ **Information Disclosure Statement**
    ☒ **Form PTO-1449**
    ☒ **Copies of IDS References (C1-C95)**

☐ Certified Copy of Priority Document(s)

☐ Sequence Listing submission
    ☐ Paper Copy/CD
    ☐ Computer Readable Copy
    ☐ Statement verifying identity of above

☐ Copy of Notice to File Missing Parts of Application (PTO-1553)

☐ Formal Drawing(s)

☐ Request For Continued Examination (RCE) Transmittal

☐ Power of Attorney (Revocation of Prior Powers)

☐ Terminal Disclaimer

☐ Executed Declaration and Power of Attorney for Utility or Design Patent Application

☐ Small Entity Statement

☐ CD(s) for large table or computer program

☐ Amendment After Allowance

☐ Request for Certificate of Correction
    ☐ Certificate of Correction (in duplicate)

☐ Notice of Appeal to Board of Patent Appeals and Interferences

☐ Appeal Brief (in triplicate)

☐ Status Inquiry

☒ **Return Receipt Postcard**

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☐ Certificate of Facsimile Transmission under 37 C.F.R. 1.8

☐ Additional Enclosure(s) *(please identify below)*
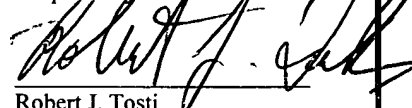
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FORM PTO - 1449	ATTORNEY DOCKET NO.: VXM-001B
INFORMATION DISCLOSURE STATEMENT	APPLICANT(S): Vitaliano et al.
	SERIAL NO.: 10/661,466
	FILING DATE: September 11, 2003 GROUP: 1631

U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
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	A2	4,999,842	3/12/91	Huang et al.	372	45	
	A3	5,287,377	02/15/94	Fukuzawa et al.	372	45	
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	A5	5,671,437	09/23/97	Taira, K.	395	800	
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	A7	5,940,193	08/17/99	Hotaling et al.	359	11	
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EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)

OTHER ART, JOURNAL ARTICLES, ETC.

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	C87	"Introduction to Mass Spectrometry," masspec.scripps.edu/information/intro/chapter3.html (date unknown)
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EXAMINER	DATE CONSIDERED

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